1. Mitochondria in Kidney:
   1. Black staining of the mitochondria
   2. More black staining means more mitochondria
      1. Bottom of kidney slide lots = more transport
      2. Top has little = lighter = less transport
   3. Mitochondria have cristae
   4. Mitochondria are rod like and about 0.25 um in diameter (can be 7 um in length)
2. Ribosomes and RER in spinal nervous tissue
   1. Cytoplasm is filled with this blue staining material = RER and Ribosomes
      1. The stain actually is staining the ribosomal RNA in the ribosomes on the RER
      2. The nucleolus is also highly stained because this is where ribosomes are constructed
      3. \*\*\*Do not rely on color to make determinations because the parts being stained could be dispersed, concentrated, etc which will cause different coloring
         1. Should probably understand what each stain marks/ binds to
3. Golgi apparatus in Dorsal Root Ganglion Slide
   1. The Nucleus is a clear color
      1. Surrounded by black dots which may look crescent shaped
         1. These are the Golgi apparatuses
            1. Golgi are perinuclear (only around the nucleus)
            2. Can see very discretely unlike the ribosomes

Specific silver stain that only differentiates Golgi

1. Microfilaments and Skeletal Muscle
   1. Some microfilaments stain dark and then adjacent to this there are other microfilaments that stain lighter which causes the appearance of bands
2. Microfilaments and Tongue Cornification
3. Glycogen and the liver
4. Nuclei
   1. Use nuclei to identifiy cell type
      1. Use size, location, and shape to determine cell type
5. Nucleus and the Liver
   1. Can see difference in the nucleus of the hepatocyte and the endothelial cell
6. Neurovascular bundle and nucleus (Nerve, artery, and vein run together)
7. Skeletal muscles and nuclei
   1. Nuclui located on the periphery
   2. Can have many nuclei
   3. Also see microfilaments (pink) in muscle cell
8. Blastula and Mitosis (Nucleus examination)
   1. Black dots are yolk in blastula 🡪 ignore it